



Domino effect: Each violent death in turn affects additional individuals and results in multiple economic losses.



Data resources improve understanding of suicide in Wisconsin

System offers insight into circumstances of violent deaths in Wisconsin

Suicides account for the largest percentage of violent deaths in Wisconsin, with approximately four suicides for every one homicide in an average year.

Suicide deaths do not present the complete burden suicide imparts on Wisconsin. For that reason, Table 1 on page 2 also provides information on the number of inpatient hospitalizations and emergency department visits due to self-inflicted injuries in 2005. These combined fatal and nonfatal injury

data better describe the individuals in need of preventive services to reduce future attempts and deaths.

Understanding the circumstances associated with suicide deaths is also critical to development of prevention strategies. Page 3 is dedicated to the circumstances associated with the 2005 suicide deaths. To provide more in-depth information on suicide attempts and deaths in Wisconsin, a new report, *The Burden of Suicide in Wisconsin*, is being compiled and will be released in Spring 2008.

As this Update is being written, the WVDRS abstraction team is nearing completion of the 2006

WVDRS dataset. With the completion of 2006 data, there will be three years of WVDRS data to analyze and share. Preliminary analysis of the data indicates an increase in the accuracy and thoroughness of the information received from reporting sources.

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Suicide fatalities and attempts, Wisconsin, 2005

TABLE 1. Counts and rates of suicide deaths, hospitalizations and emergency department (ED) visits due to self-inflicted injuries, 2005.

	Deaths		Hospitalizations*		ED Visits*	
	N	Rate [†]	N	Rate	N	Rate
Total	651	11.3	5,120	91.7	4,350	78.3
Male	526	18.4	1,799	63.8	1,647	58.4
Female	125	4.4	3,321	120.8	2,703	98.9

*Data obtained from Wisconsin Interactive Statistics on Health (WISH) at www.dhfs.wisconsin.gov/wish/

[†] The age-adjusted rate for suicide deaths is approximate, since 12 suicide victims in the WVDRS had an unknown age; the rate is slightly lower due to the missing data.

WVDRS provides information on toxin use for suicide victims

Increased testing needed to improve understanding of suicide deaths

The WVDRS documents information pertaining to the testing for, and subsequent results of, alcohol and drugs in the victims of violent death. While the State Lab of Hygiene provides free testing for the majority of these cases, coroners or medical examiners (CME) may not use this service due to long wait times for results. Additionally, toxicology testing is not required for victims of violent death in Wisconsin.

A second issue is that toxicology results often do not accompany the

report submitted by a coroner or medical examiner (CME). If the CME does not provide these to the WVDRS abstraction team once the results are provided by the testing facility, that information will not be entered in the WVDRS case file.

Toxicology testing is more frequently conducted for homicide deaths than for suicide deaths. This is particularly the case when the cause of a suicide death is more clearly defined, such as if a firearm was used in the death. Alcohol and drugs may not be the cause of death in these cases, but knowing if alcohol or drugs was present in the victim's body helps us to understand

risk factors so that future deaths may be prevented.

In 2005, approximately 29% of suicide victims were tested for alcohol and drugs, as reported to the WVDRS abstraction team. If toxicology test information was not submitted to the abstraction team, that information is not reflected in Table 2.

Even though the 2006 data are incomplete, preliminary analysis of the toxicology reports on deaths by suicide revealed an increase in available toxicology reports for these victims, with approximately 40% of victims with toxicology testing.

TABLE 2. Toxicology testing and results for suicide deaths, Wisconsin, 2005.*

Toxin	Number of victims tested	Percent of suicide victims tested	Number of positive results	Percent positive of those tested
Alcohol	190	29%	57	30%
Amphetamine	186	29%	4	2%
Antidepressant	188	29%	31	16%
Cocaine	185	28%	14	8%
Marijuana	184	28%	13	7%
Opiate	186	29%	24	13%
Other substance	188	29%	62	33%

*More than one toxin may be present for each victim.

Circumstances associated with suicide deaths, 2005

The WVDRS provides critical information on known events or situations that occurred in a decedent's life prior to death by suicide. The categories included are standardized across the 17 states that participate in the National Violent Death Reporting System. Understanding these reasons helps guide prevention strategies such as increased access to mental health services. Table 3 provides a listing of suicide circumstance categories.

In 2005, approximately 34% of suicide victims had known circumstances attributed to their deaths. Part of the WVDRS abstraction team's ability to attribute circumstances is through accuracy and thoroughness of the information they receive from the various reporting sources. The other part comes from experience in conducting abstractions. Preliminary data from 2006 report that 59% of suicide victims have known circumstances, suggesting both improved reporting and abstraction.

What are the most common suicide circumstances?

- Current mental health problem
- Current depressed mood
- History of suicide attempts
- Physical health problem
- Intimate partner problem

TABLE 3. Circumstances cited in suicide deaths, Wisconsin, 2005.*

	Yes	Percent of suicide deaths
Circumstances known	221	34%
Circumstance	Yes	Percent of known circumstances
Current depressed mood	85	38%
Current mental health problem	115	52%
Current treatment for mental illness	77	35%
Ever treated for mental illness	91	41%
Alcohol problem	38	17%
Other substance problem	33	15%
Left a suicide note	86	39%
Disclosed suicide intent	66	30%
History of suicide attempts	64	29%
Crisis in past two weeks	55	25%
Physical health problem	59	27%
Intimate partner problem	58	26%
Other relationship problem	13	6%
Job problem	31	14%
School problem	7	3%
Financial problem	37	18%
Recent suicide of friend/family	2	1%
Other death of friend/family	20	9%
Recent criminal legal problem	28	13%
Other legal problem	13	6%
Perpetrator of violence in past month	4	2%
Victim of violence in past month	2	1%

*More than one circumstance may be selected for each death; therefore, total circumstances will not add up to victim count for which circumstances were known.

WISCONSIN VIOLENT DEATH REPORTING SYSTEM

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Upcoming issues

Violent deaths in older adults

The highest rate of suicide death occurs in the 35-44 year age group in Wisconsin, and that rate decreases until age 64. The rate increases for those 65 years and older. Homicide deaths in older adults are much less frequent, but we will explore the circumstances associated with these deaths.

Education level

Understanding how educational attainment affects both victims and suspects of violent deaths may be a critical

component in developing prevention programming.

Release of 2006 WVDRS data

The next set of WVDRS data will be available this spring. Upcoming Update issues will highlight these new data, and compare them to findings from 2004 and 2005.

Multi-state report

All 17 states that participate in the National Violent Death Reporting system are compiling a report. This will be featured in a future Update.

METHODOLOGY

What is considered a violent death?

Violent death includes homicide, suicide, unintentional firearm death, death from legal intervention, death related to terrorism, and death from undetermined manner or intent.

How are deaths included in the WVDRS?

A violent death case is initiated through a death certificate. The WVDRS abstraction team enters this case into the system and collects information from additional sources, including the coroner/medical examiner report, police report, and crime lab, among others. The abstraction team attempts to get as much information as possible for each incident.

Technical notes

Rates presented in this document are age-adjusted, based on the number of events in the Wisconsin population in a specific year. More detailed information on rate calculations or other methods may be provided upon request.

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WISCONSIN VIOLENT DEATH REPORTING SYSTEM

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